The presence of other gene and protein sequences bearing significant homology to Drosophila S2P (SEQ ID NO.4) was investigated using the BLAST family of computer programs (Altschul et al., supra). The following amino acid sequences were the most similar: S2P Homo sapiens (GI2745733); S2P Cricetulus griseus (GI2745731); SP2 metalloprotease, Homo sapiens (GI4164134 and GI4164135); putative protein Arabidopsis thaliana (GI2982448); conserved protein Methanobacterium thermoautotrophicum (GI2622476); and Orf c04034 Sulfolobus solfataricus (GI1707806). The most homologous sequence was human S2P (GI2745733) which shared 9 contiguous amino acids at positions 201-207 of SEQ ID NO:4. Amino acid 127 to 501 of SEQ ID NO:4 shares 32 % sequence identity with amino acids 148 to 515 of GI2745733.

e1

Please delete the paragraph on page 41 lines 8-19 and replace it with the following:

These reactions, together with sequence from M13 forward and reverse primers, gave a full sequence in both directions that was nearly identical to the posted, unfinished sequence from Y47D3. The cDNA sequence of the ceSREBP gene is provided in SEQ ID NO:1. The cDNA is 3419 nucleotides long. This full-length clone contained a single open reading frame with an apparent translational initiation site at nucleotide position 24 and a stop signal at nucleotide position 3365. The predicted polypeptide precursor is 1113 amino acids long. Additional features include an acidic domain at about nucleotides 24 to 233 (amino acid residues 1 to 69); a possible second acidic domain at about nucleotides 987 to 1040 (amino acid residues 321 to 338); a basic Helix-loop-helix domain at about nucleotides 1089 to 1286 (amino acid residues 355 to 421); a first transmembrane domain at about nucleotides 1455 to 1514 (amino acid residues 477 to 497); and a second transmembrane domain at about nucleotides 1653 to 1706 (amino acid residues 543 to 561).

e2

Remarks

Deleted figures 3A – 10 are redundant, as they contain the same nucleic acid and amino acid sequence information provided in SEQ ID NOs: 1-8.

The replacement paragraph on page 56 lines 34-36 and page 57 lines 1-7 differs from the deleted paragraph in that it omits an improper reference to Figure 2.

The replacement paragraph on page 41 lines 8-19 differs from the deleted paragraph in that it omits an improper reference to Figure 2. Both the deleted and the replacement paragraphs properly describe that SEQ ID NO:1 provides the ceSREBP cDNA sequence. The amended sentence is reworded for grammatical clarity.